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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,615	09/27/2001	Masakazu Hirano	09412.65876	7774

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EXAMINER

NEGRON, DANIEL L

ART UNIT PAPER NUMBER

2651

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/965,615

Applicant(s)

HIRANO ET AL.

Examiner

Daniell L. Negrón

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5,7-12 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7-12 and 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 9-12, 20, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchiike et al U.S. Patent No. 6,236,527.

Regarding claim 11, Uchiike et al disclose a storage apparatus comprising a load/unload mechanism, configured to carry out a ramp load/unload operation to load/unload a head (4) which is provided on an arm (3) with respect to a recording medium (1) by a driving part e.g. voice coil motor (5), which drives the arm (See Fig. 4 and column 3, lines 41-63).

Uchiike et al further disclose a storage apparatus comprising a controller e.g. CPU (10) configured to control a driving current which is supplied to the driving part so as to undergo a gradual change during at least one of a load operation for a head feed operation which feeds the head toward the recording medium, and an unload operation as the unload operation is completed (see Fig. 4).

Uchiike et al further disclose a storage apparatus wherein a gradual change in the driving current occurs at least during arbitrary times, other than when a speed control operation is carried out, the speed control operation controlling a speed of the head when the head is loaded to a

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desired track of the recording medium, the arbitrary times including a time when the arm is released in a parking area by the head feed (i.e. load) operation, and/or when the arm is pushed in the parking area as the unload operation is completed (see Figs. 2(b), 5, column 6, lines 11-26, and Response to Arguments for details).

Furthermore, it is considered that Uchiike et al show at least a gradual change (C2) while the head is pushed to ascend the slope (6d) of the parking area (6) during an unloading operation. Furthermore, it is considered that the current change which occurs between C2 and P2 when the head is secured over the parking surface is relatively gradual in comparison to the change that occurs between P1 and C1 during a loading operation.

Regarding claim 1, method claim 1 is drawn to the method of using the corresponding apparatus claimed in claim 11. Therefore method claim 1 corresponds to apparatus claim 11 and is rejected for the same reasons of anticipation as used above.

Regarding claims 2, 9, 10, 12, 20, and 21, claims 1, 2, 9, 10, 12, 20, and 21 are rejected for the same reasons discussed in the Office action mailed on July 13, 2005.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiike et al U.S. Patent No. 6,236,527 in view of Huang et al U.S. Patent No. 6,583,964.

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Regarding claims 5, 15, and 17, claims 5, 15, and 17 are rejected for the same reasons discussed in the Office action mailed on July 13, 2005.

5. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiike et al U.S. Patent No. 6,236,527 in view of Phan et al U.S. Patent No. 5,760,992.

Regarding claims 7 and 18, claim 7 and 18 are rejected for the same reasons discussed in the Office action mailed on July 13, 2005.

6. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiike et al U.S. Patent No. 6,236,527 in view of Koizumi et al U.S. Patent No. 5,982,570.

Regarding claims 8 and 19, claim 8 and 19 are rejected for the same reasons discussed in the Office action mailed on July 13, 2005.

### ***Response to Arguments***

7. Applicant's arguments filed November 16, 2005 have been fully considered but they are not persuasive. Applicant argues that Uchiike et al fail to disclose or suggest that a gradual change in a driving current occurs at least during arbitrary times, other than a time when a speed control operation is carried out, the arbitrary times including a time when the arm is released in a parking area by the head feed operation and/or when the arm is pushed in the parking area as the unload operation is completed. However, the Examiner respectfully disagrees for the reasons discussed above in the rejection of claims 1 and 11.

Regarding claims 2, 5, 7-10, 12, 15, and 17-21, claims remain rejected under 35 U.S.C. 102(e) and 35 U.S.C. 103(a) for the same reasons discussed in the previous Office action since claims depend from independent claims 1 and 11.

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***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniell L. Negrón whose telephone number is 571-272-7559.

The examiner can normally be reached on Monday-Friday (8:30am-5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DLN   
December 7, 2005

  
**DAVID HUDSPETH**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**